

## Interim Structural and Operational Plan Modeling Assumptions

The South Florida Water Management Model (SFWMM) version 3.8 was used in continuous simulation mode (31 year simulation using 1965 to 1995 climatic data set) to simulate 95 Base, which has current normal structure operations and demands with Test 7 phase I operations in South Dade Conveyance System (SDCS). Specific operations of the 95 Base and operations for the South Dade Conveyance System are give in Table 1 below.

Table 1. Operational assumptions as used in the SFWMM v3.8.

|                      | <b>95 Base</b>   |
|----------------------|--|
| Regulation Schedule  | Current C&SF regulation schedules throughout system  |
| S-343 A/B and S-344  | Per current WCA-3A regulation schedule.  |
| S-12 A/B/C/D         | Operated according to current regulation schedule which includes rainfall plan target. Split 10/20/30/40 percent west to east.       |
| S-333: G-3273 < 6.8' | S-333 open to deliver 55% of Shark Slough target flows as per rainfall plan target (rainfall formula + WCA-3A regulatory discharge). |
| S-333: G-3273 > 6.8' | S-333 closed   |
| L-29 constraint      | 8.0 ft   |
| S-337                | Water supply only  |
| S-151                | Per current WCA-3A regulation schedule.  |
| S-335                | Start opening 7.2, full open 7.5   |
| S-334                | closed   |
| S-338                | Test 7 Phase I<br>Start opening 5.5, full open 5.8   |
| G-211                | Start opening 5.5, full open 6.0   |
| S-331                | Start pumping 4.8, pumps down to 4.3   |
| S-332B               | Non-existent   |
| S-332D               | Non-existent   |
| S-332                | Operated according to Taylor Slough Rainfall plan with 465 cfs capacity, subject to 165 cfs limitations from Mar 1 to Jul 15.        |
| S-175                | Start opening 4.3, full open 4.7   |
| S-194 and S-196      | Start opening 4.8 full open 5.3  |
| S-176                | Start opening 4.75 full open 5.0   |
| S-177                | Start opening 3.6 full open 4.2  |
| S-18C                | Start opening 2.3 full open 2.6  |
| S-197                | Open - see footnote <sup>1</sup><br>Close at 2.3   |

<sup>1</sup> S197: 95 Base criteria: Uses same as Test 7 phase I criteria, namely: Open 3 gates if S177 open and S177 > 4.1 ft or S18C > 2.8 ft. Open 7 gates if S177 > 4.2 ft or S18C > 3.1ft. Open 13 gates if S177 > 4.3 ft or S18C > 3.3 ft. Close when all following conditions are met: 1) S-176 < 5.2 and S-177 < 4.2, 2) Storm moved away from basin, and 3) after 1 and 2 are met, keep the number of S-197 culverts open necessary only to match residual flow through S-176. All culverts closed if S-177 < 4.1 after all conditions satisfied. . In SFWMM flow is limited to keep stage above the gate closed levels specified above.